



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## PROGRESS OF AMERICAN ARCHAEOLOGY DURING THE PAST TEN YEARS

---

IN the Tenth Annual Report of the Council of the Institute (1889), at their request, I endeavored to give a "brief survey of the progress of archaeological studies in this country in the decade that had elapsed since the Society was established." I have been asked to continue this survey and to bring it down to the present time.

In my former sketch I naturally began with a statement of what has been accomplished by our own Society, especially through its publication, in 1881, of Mr. Bandelier's *Report on the Ruins of Pecos*, accompanied by a *Historical Introduction to Studies among the Sedentary Indians of New Mexico*; and in 1884, of his *Report upon an Archaeological Tour in Mexico in 1881*. I then stated that "two works by Mr. Bandelier, which are essential to a complete understanding of what has been already accomplished for the scientific investigation of American antiquities, still remain for the Society to publish. The first is the concluding portion of his *Historical Introduction*. This comprises an account of the narratives of the different expeditions into that region, up to the beginning of the seventeenth century, with a discussion of the routes followed, and an attempt to identify the localities visited, especially by Espejo and Oñate. It will also be necessary to print a complete report of his final explorations in Northern Mexico, . . . in the valley of Sonora, . . . and of the remarkable ruins of the Casas Grandes, near Janos, in the State of Chihuahua. Of these there is no existing adequate account, and Mr. Bandelier's

complete plans, with their explanation, not only of the house architecture, but of the military construction, and of the system of irrigation, and of the trails of the tribes, ought not to be lost."

Of this concluding portion of the *Historical Introduction*, Mr. Bandelier has completed a part, which was published in 1890 at the joint expense of the Institute and of Mrs. Mary Hemenway. It makes Volume V of the *American Series* of our publications, and is entitled, *Contributions to the History of the Southwestern Portion of the United States*. The remainder of this *Historical Introduction* has never been written. Mr. Bandelier's *Final Report of Investigations among the Indians of the Southwestern United States, carried on mainly in the years from 1880 to 1885*, has been published by the Institute, making Volumes III and IV of its *American Series*; Part I in 1890, and Part II in 1892. On the merits of these important publications it is unnecessary for me to dwell, as the members of the Institute, doubtless, fully appreciate them.

The late Mrs. Mary Hemenway, who, among the many objects of her generosity, had become greatly interested in the subject of American antiquities, undertook to carry on at her own expense systematic explorations in the Salado and Gila Valleys, in Arizona. The Hemenway Southwestern Archaeological Expedition was placed, in 1887, under the charge of Mr. F. H. Cushing,<sup>1</sup> who had lived some time among the Zuñis and had been adopted into that tribe. He associated with himself several scientific assistants, among them Mr. Bandelier. After several years' labor, resulting in the collection of a vast amount of material, which was temporarily housed in Salem, Mass., the expedition was finally abandoned on account of the failure of Mr. Cushing's health. This has prevented his giving to the world any final and complete account of his work. Dr. J. W. Fewkes was placed in charge of the archaeological and ethnological material collected, and continued to carry on the study of the Sedentary Indians of Arizona, passing the summers of 1891-92

<sup>1</sup> We regret to have to record the death of Mr. Cushing, on April 10, as this paper is passing through the press.

at the Hopi or Moqui pueblos (the ancient province of Tusayan), and making extensive explorations there. In 1892, Dr. Fewkes took to the Columbian Historical Exposition, at Madrid, held in commemoration of the Fourth Centenary of the discovery of America, a collection of objects, both ancient and modern, procured from this tribe as the representative of the most primitive of the Sedentary Indians of the Southwestern United States. A catalogue of the Hemenway Exhibit was published by our government as a portion of the official report of the Madrid Commission upon the various American exhibits. A part of this was a collection of copies of documents relating to the history of Arizona and New Mexico, made by Mr. Bandelier. As the fruits of the Hemenway Expedition, Dr. Fewkes has published four volumes of *A Journal of American Ethnology and Archaeology*, mainly devoted to an account of religious ceremonies of the Moqui Indians. The third volume, however, published in 1890, contained *An Outline of the Documentary History of the Zuñi Tribe*, by Mr. Bandelier. After Mrs. Hemenway's death in 1894, the trustees under her will, being authorized to make such disposition of her various collections as would best subserve the study of history and archaeology, intrusted the whole of her extensive archaeological collections to the Peabody Museum, at Cambridge, with the express stipulation that the installation and classification of the objects should be under the immediate direction of Dr. Fewkes. The gift was accepted by the trustees of the Museum, and Dr. Fewkes arranged the part that relates to the Moqui so as "to show in monographic form the character of the past and present of the Tusayan, or Moqui Indians, as far as this is possible by objects illustrating their arts and practices." The collections include also the archaeological material obtained in the early years of the expedition from the Salado Valley and from the Zuñi pueblos, as well as the documents copied by Bandelier. Besides his *Journal*, Dr. Fewkes has contributed to successive volumes of the *Journal of the American Folk-Lore Society* and to the *American Anthropologist*, many interesting studies of the religious ceremonies of

the Pueblos, as the result of his connection with the Hemenway Expedition. In 1895 he entered the service of the Smithsonian Institution, at Washington, and there have been published in the Smithsonian Reports for that year, 1896 and 1897, preliminary accounts of the different explorations undertaken by him in this service. The Fifteenth and Sixteenth Annual Reports of the Bureau of Ethnology also contain important papers by him upon Tusayan ceremonials; while the forthcoming Seventeenth Report will contain the full account of his work in 1895.

A World's Columbian Exposition was held at Chicago, in 1893, and one department was specially devoted to ethnology, archaeology, and kindred subjects, which was placed in charge of Professor F. W. Putnam, curator of the Peabody Museum. at Cambridge. As early as 1891 the work of gathering material for exhibition was begun, and eventually as many as one hundred persons were employed in North, Central, and South America, in making collections under the immediate direction of Professor Putnam and his chief assistant, Dr. Franz Boas. The results were most valuable for the study of both the ethnology and the antiquities of America. Collections from Greenland and Labrador, from Alaska and the Columbia River, Vancouver, and Canada; from nearly all the Indian tribes in the United States; from the West Indies and Mexico; from Yucatan and Honduras; from Ecuador, Peru, Bolivia, and even down to Patagonia, illustrated the ethnology of this continent. Important archaeological work was undertaken; in Maine, by Mr. C. C. Willoughby in exploring some burial-places of very great antiquity; in Connecticut, in connection with a prehistoric soapstone quarry; at Trenton, in the Delaware Valley, where relics of the Palaeolithic man were claimed to have been discovered; in Ohio, at several of the great earth-works and from many mounds and burial-places; in Yucatan and Honduras, where plaster casts of the most important sculptured stones were taken; and at Ancon, in Peru, from which site Dr. G. A. Dorsey brought back a reproduction of an ancient burial-place. These and other explorations furnished such an exhibit of the

ethnology and antiquities of our country, as has never been equalled. It is greatly to be regretted that no official report of this exhibition has been published.

During the progress of the Exposition a series of congresses was held at Chicago, among which was one of Anthropology. This was largely attended, and many valuable papers were read, which were afterward published in a volume entitled *Memoirs of the International Congress of Anthropology*, 1894.

Of the objects procured for this Exposition those collections made by the Peabody Museum came to Cambridge, but the larger part formed the foundation for the Anthropological Department of the Field Columbian Museum, at Chicago, which was the direct result of the World's Fair. This department was at first placed under the charge of Dr. F. Boas as curator, and after him Mr. William H. Holmes, who left the Bureau of Ethnology for this position. In December, 1894, on the invitation of Mr. Armour, Mr. Holmes accompanied a party of scientific investigators in an expedition to Mexico. The results of his explorations there were published in December, 1895, and in February, 1897, as the first of the Anthropological Series of publications of the Museum, under the title *Part I. Monuments of Yucatan; Part II. Monuments of Chiapas, Oaxaca, and the Valley of Mexico*. Dr. George A. Dorsey, who had been for several years assistant in the Peabody Museum, at Cambridge, was made assistant curator in 1896, and published, in August, 1897, *Observations on a Collection of Papuan Crania*, with notes by Mr. Holmes. When Mr. Holmes returned to Washington, in 1898, to take charge of the Anthropological Department of the National Museum, Dr. Dorsey became curator. Since then he has published *A Bibliography of the Anthropology of Peru*, 1898. The last publication of the Field Columbian Museum was in July, 1898; *Ruins of Xkichmook, Yucatan*, by Edward H. Thompson, giving the results of his observations extending over a period of seven years.

Early in 1894 Professor F. W. Putnam, in addition to his duties at Cambridge, assumed the charge of the Department of

Anthropology in the American Museum of Natural History, at New York, and since then great progress has been made there in this branch. Large collections of archaeological material have been acquired by gift and purchase, which are now exceedingly well displayed through the enlargement of the building, and several explorations have been undertaken. In 1896 the Trustees of the Museum assumed the expense of continuing investigations in Peru by Mr. Bandelier, which had been carried on for two years at the charge of Mr. Henry Villard. Extensive collections from the coast town of Arica and from the ruins of Tiahuanaco, the most important site after Cuzco, have been already received; among them are a number of trephined skulls. Later, Mr. Bandelier explored the islands in Lake Titicaca and sites in Bolivia; but as yet none of the results of these investigations have been given to the world, although the large collections he has made are arranged in the Museum. Since 1894 Dr. C. Lumholtz has been carrying on, for four years, investigations among the tribes of the Sierra Madre Mountains, in central and southern Mexico; and large collections, principally ethnological, have reached the Museum, adding greatly to our knowledge of their history.

In 1898 a joint expedition to eastern Mexico, by Dr. Lumholtz and Dr. A. Hrdlicka, resulted in much ethnological and archaeological work of importance which is soon to be published by the Museum.

Messrs. B. T. B. and Fred E. Hyde, Jr., of New York, have presented to the Museum their extensive collection from the cliff-houses and burial-caves of Utah, New Mexico, and Colorado; and for the past three years they have been carrying on, at their own cost, explorations among the ancient pueblos of New Mexico, especially at the Pueblo Bonito, in the Chaco Cañon, from which a large amount of valuable material has been secured. These investigations are going on at the present time under the direction of Professor Putnam, with Mr. G. H. Pepper and Mr. Richard Wetherill chief assistants in the field.

In 1897-98 Mr. M. H. Saville, assistant curator of the

Department of Anthropology, carried on extended researches in Mexico, especially at Xoxo and Monte Alban, in Oaxaca, and at the celebrated ruins of Mitla. In the *Bulletin of the Museum*, vol. VIII, he has published an article on *The Temple of Tepoztlan, Mexico*, excavated by Mr. Rodriguez, and in vol. IX, one on *An Ancient Figure of Terra Cotta from the Valley of Mexico*. This is a unique object of life size, found in a cave near the city of Texcoco, and is exceedingly curious, as representing an ancient Mexican war-chief dressed in armor of quilted cotton. Volume X of the *Bulletin* contains an article by Doctors Lumholtz and Hrdlicka on *Marked Human Bones from a Prehistoric Tarasco Indian Burial-place in the State of Michoacan, Mexico*.

For four years Mr. Volk has been carrying on investigations at Trenton, N.J., under Professor Putnam's direction, and under the patronage of the Duke of Loubat and of Dr. F. E. Hyde, to settle, if possible, the question of the discovery there of relics of Palaeolithic man. Other successful explorations have been conducted in Ohio and Kentucky, in several Indian sites in the valley of the Hudson, and in the immediate vicinity of the city of New York; and the Museum has coöperated with the Peabody Museum, at Cambridge, in conducting explorations in Honduras.

But by far the most important anthropological investigation that has ever been undertaken by the American Museum was made possible by the generosity of its President, Mr. Morris K. Jesup. He has taken special interest in the question of the origin of the American Indians and the theory that this continent was peopled by migration from Asia, and, believing that light would be shed upon this subject by a systematic study of the tribes inhabiting the coasts of the North Pacific Ocean, he has assumed the whole expense of such researches, to be prosecuted during a period of several years beginning in 1897. The field work of the Jesup Expedition, in 1897, was confined to the coast of British Columbia, and was carried on by Dr. F. Boas, assistant curator in charge of the Ethnological Division, who has the immediate direction of the Jesup Expedition, and by Dr. L. Farrand and by



Mr. Harlan I. Smith. It was directed mainly to the exploration of the prehistoric remains of that region and to the study of the Bella Coola and northern Kuakiutl tribes. A summary account of the results of the season's work was given in *Science*, October 8, 1897. The following year the work was taken up on a more extended scale, and Mr. Gerard Fowke and Mr. R. B. Dixon, with several resident investigators, were added to the working force. Parties were in the field on the coast of the State of Washington, in the southern interior of British Columbia, on the Amoor River in Siberia; and archaeological and ethnological work has been prosecuted on both continents. Valuable collections have been received from the tribes of Thompson River, and from those of the northern part of Vancouver Island and of the central parts of the coast of British Columbia. Archaeological investigations were carried on by Mr. Fowke on the Amoor River, and ethnological by Dr. B. Laufer in the island of Saghalien. Another party is about starting for two years' work in northern Siberia. Accounts of the work done in 1898 can be found in the numbers of *Science* for April 14 and May 26, 1899. During the past summer the work has been continued, but no statement of what has been accomplished has yet appeared. The Museum has begun the publication of the scientific results of the Jesup Expedition in the shape of Memoirs in quarto form. So far there have appeared *Facial Paintings of the Indians of Northern British Columbia* and *Mythology of the Bella Coola Indians* by Franz Boas, 1898, and *Archaeology of Lytton, British Columbia*, by Harlan I. Smith, 1899. Mr. Boas has also published, in vol. IX of the *Bulletin of the Museum*, an article on *The Decorative Art of the Indians of the North Pacific Coast*.

But while Professor Putnam has been actively engaged in the management of the Department of Anthropology in the American Museum, for the past five years, his work, originally undertaken at Cambridge in the interests of American archaeology, in the Peabody Museum, has been vigorously pursued, as is abundantly manifested by his reports upon the doings of that institution for the past ten years. I will only attempt to enumerate

here some of the more important of the services rendered by the Peabody Museum in the field of American antiquities during that period. The first was the raising of a large sum of money by contributions to purchase and preserve as a public park the Great Serpent Mound, in Ohio. A complete model to scale of this remarkable earthwork has been constructed and placed on exhibition. This was followed by explorations of the gravel banks of the Little Miami River, and the discovery in them of ancient hearths. Then renewed investigations were made of the Turner Group of mounds in that same region, and continued until that important work had been thoroughly explored. About twenty miles above the Turner Group, at Foster's, a remarkable circumvallation over half a mile in extent was investigated. At the northern portion of this singular work is "a carefully laid wall of flat stones along the outer side several feet in height; behind were loose stones, both large and small, making nearly half the structure, and behind and over these stones was a mass of clay burnt to all degrees of hardness, from that only slightly burnt to great masses of slag, showing that the clay had been subjected to a very great heat, in places forming a vitreous surface over the slag, which resembled that from a blast furnace." This singular structure seems to resemble in some respects the remarkable earthwork in Jefferson County, Wisconsin, which goes by the name of Azatlan. This is described by Mr. James D. Butler, in a letter to Schliemann (*Troja*, p. 180), as "a brick or terracotta crust baked *in situ*." In other particulars it seems more like the "vitrified forts," of which numerous examples are known in Scotland, the Orkneys, France, and Germany.

During the various explorations carried on by the Peabody Museum, advantage was taken of the opportunity to give practical training in scientific methods of excavation to young men pursuing their studies at the Museum. This has been the continuous policy of the institution, and it has resulted in furnishing *five* men, trained there, to fill places of responsibility elsewhere as professional anthropologists.

After certain explorations had been carried on for a couple of years in Yucatan, the most important work ever undertaken under the auspices of the Peabody Museum was the Honduras Expedition. This was started in 1891, under a special grant from the government of that country of the exclusive right of exploration for the term of ten years, with the privilege of retaining for the Museum one half of the objects secured from ancient sites and burial-places. This work has been going on steadily ever since, although unfortunately interrupted for a while by the death from fever (February 18, 1893), of the head of the expedition, Mr. J. G. Owens, to the great loss of American archaeology. After his death Mr. George B. Gordon took charge of the work, and has continued to be the executive head of the expedition ever since. The expenses of all these explorations have been quite large, amounting to over \$32,000 four years ago and much increased since then; and at first they were supplied by generous contributors in New England, of whom Messrs. Charles P. Bowditch and Stephen Salisbury were the largest givers. In fact the success of the exploration is greatly due to Mr. Bowditch's energetic support in various ways besides the gift of money. During one year Messrs. Jesup, Whitney, and Loubat made a contribution on behalf of the American Museum, of New York, which received its portion of the objects collected. Moreover, Mr. Salisbury has again secured the valuable services of Mr. Edward H. Thompson for the benefit of the Peabody Museum. He had for several years been working for the Field Columbian Museum, and has a wider knowledge than any other explorer of the ruins of the prehistoric cities of Yucatan.

The practical work of the Honduras Expedition began at Copan in the dry season of 1891-92 (December to May), and many curious and interesting objects were sent to the Museum as its result; among them were human teeth having a small piece of jadeite inserted in a hole drilled in their front surface. Plans were made of the principal ruins, photographs taken, and paper moulds prepared of important sculptures. Numer-

ous original carved stones were brought away with the greatest labor and difficulty, as they had to be transported on muleback many miles. Moulds were also made of the huge carved monoliths at the ruins of Quirigua, in Guatemala, from which casts have been taken and distributed. The sculptures and carved inscriptions secured in this way have excited the wonder and admiration of all beholders. During the season of 1893-94 the exploration was retarded owing to Mr. Owens' death; but in 1894-95 one of the great pyramids at Copan was investigated by Mr. G. B. Gordon, as was also a remarkable stairway, 24 feet wide and over 100 feet high, having the front of each step covered with carvings and sculptures. This is regarded as probably the longest and most important of the inscriptions in Central America. In January, 1896, the examination of ancient deposits on the banks of the Uloa River, and of several caverns, brought to light the work of other peoples than those who built the great structures of Copan. Work was interrupted at Copan in the season of 1896-97, pending the settlement of rights of exploration with the new government of Honduras, but was continued on the Uloa River. Relics obtained from ancient sites along the river show a mingling of the arts of Nicaragua and of Southern Mexico with those of Guatemala and Honduras. Mr. Gordon returned in September, 1897, and no further work has been yet reported, as his time has been devoted to preparing reports of the previous explorations. Meanwhile Mr. Bowditch has secured the services of Mr. T. Maler to visit the Lacandon country with the hope of possibly obtaining some clue to the deciphering of the Maya writings through knowledge of their meaning still lingering among the unsubdued tribes of Central America.

In the meantime the Peabody Museum has begun the publication of a series of illustrated reports, in quarto form, of the researches in Central America and Yucatan: No. 1, *Prehistoric ruins of Copan, Honduras*, by George B. Gordon, 1896; No. 2, *Caves of Loltum*, by Edward H. Thompson, 1897; No. 3, *Choltunes of Labna*, by the same; Nos. 4 and 5, *Researches in the Uloa Valley, Honduras*, and *Caverns of Copan, Honduras*,

by George B. Gordon, 1898. Besides these publications it has issued a series of archaeological and ethnological papers in octavo form: Vol. I, No. 1, *Standard, or Head-dress, an Historical Essay on a Relic of Ancient Mexico*, by Zelia Nuttall, 1888; No. 2, *The Karankawa Indians, the Coast People of Texas*, by Albert S. Gatschet, 1891; No. 3, *The Atlatl, or Spear-thrower of the Ancient Mexicans*, by Zelia Nuttall, 1891; No. 4, *Report upon Pile-structures in Naaman's Creek, near Claymont, Delaware*, by Hilborne T. Cresson, 1892; No. 5, *A Study of Omaha Music*, by Alice C. Fletcher, 1893; No. 6, *Prehistoric Burial-places in Maine*, by C. C. Willoughby, 1898.

In 1896 the University of Pennsylvania, with the coöperation of the Bureau of Ethnology, at Washington, organized the Pepper-Hearst Archaeological Expedition to send Mr. F. H. Cushing to explore the shell mounds of the Florida coast, between Tampa and Cape Sable. Much aboriginal handiwork was secured, especially at Key Marcos, on the islands, and in the lagoons adjacent. The habitations were found to have been protected by huge banks, constructed of large conch-shells, and were in part built upon piles. In some instances the kitchen refuse had accumulated in the water underneath so as to form mounds, which were afterwards built upon. Numerous interesting objects were secured, principally from the muck which covered the inner courts of the chief structures explored. These are to be divided between the coöperating institutions, which will also publish jointly the final report upon the work accomplished. In the meantime a preliminary report has been made by Mr. Cushing at a meeting of the American Philosophical Society (November 6, 1896), which was published in its *Proceedings*, December, 1896.

The University of Pennsylvania, in 1889, established a Museum of American Archaeology, of which Dr. C. C. Abbott was appointed curator. The following year he issued a report, but resigned the position not long after; and Mr. Henry C. Mercer was made curator of a Department of American and Prehistoric Archaeology. Mr. Mercer had previously done

valuable archaeological work in various directions; in 1893, in the Trenton glacial gravels, and for three years subsequent in cave explorations in the eastern United States, as well as of the caves in Yucatan. Of these he has rendered annual reports, which have been expanded in several interesting articles in the university publications. No relics of Palaeolithic man have been found by him in the caves, but he reports that "bones of the fossil *Megalonox*, still retaining their cartilage, were exhumed from a dry deposit . . . mingled with fragments of reeds, used as torches by the Indians, in a gallery nine hundred feet from the entrance." This seems rather to reduce the age of the fossil animals than to extend that of man.

In 1897 the Free Museum of Science and Art, Department of Archaeology and Palaeontology, University of Pennsylvania, began the issue of a semiannual bulletin "to contain a *résumé* of the collections made by the Museum in its several sections, notices of publications referring to the work of the Museum, and brief papers by its officers of general scientific interest." Six numbers of this bulletin have already appeared.

The University of Pennsylvania and the science of American linguistics have equally suffered a great loss in the death of Dr. Daniel G. Brinton, July 31, 1899. Since the death of Dr. J. Hammond Trumbull, he had held the first place among the students of the native American languages. To the seven volumes of the *Library of Aboriginal American Literature*, of which I spoke in my former article, he had added an eighth, *Rig-Veda Americanus, Sacred Songs of the Ancient Mexicans*, 1890. In the same year he collected his earlier writings in a volume entitled *Essays of an Americanist*. This was followed, in 1891, by *The American Race*, the first attempt at a systematic classification of the whole American race on the basis of language. Then came *Studies in South American Languages*, 1892; *Native Calendars of Central America and Mexico*, 1893; *A Primer of Mayan Hieroglyphics*, 1895; and *Religions of Primitive Peoples*, 1897. Numerous shorter articles were contributed to the *Proceedings* of the American Philosophical Society, and to the *American Anthro-*

*polo*gist, of which he was one of the original editors. For several years past, as one of the editors of *Science*, he has been a regular contributor to that journal of 'Current Notes on Anthropology.' In 1898 he printed for private distribution *A Record of Study in Aboriginal American Literature*, containing a complete bibliography of his writings.

For some years Mr. Clarence B. Moore, of Philadelphia, has been the most prominent and energetic private investigator of American antiquities. He began his work by exploring numerous shell heaps and burial mounds in Florida. As he was in the habit of passing his winters in that state, and had his own steam house-boat, it was in his power to set a large number of men at work, which has been throughout accomplished in the most scientific manner, following the methods of research established by Professor Putnam, of the Peabody Museum, in which many specimens of his collecting are to be seen. His large private collection is arranged in the Philadelphia Academy of Natural Sciences. Some account of his investigations was given in papers published in the *American Naturalist*, 1892-94. Fuller reports were communicated to the Academy of Natural Sciences, of Philadelphia, which were published in quarto form, in their *Journal*. He has reprinted these in sumptuous style, with every possible luxury of illustration, and has distributed them widely among students of American antiquities. The first was entitled *Certain Sand Mounds of the St. John's River, Florida*, parts I, II, 1894. This was followed by *Certain River Mounds of Duval County, Florida*; *Two Sand Mounds on Murphy's Island, Florida*; *Certain Sand Mounds of the Ocklawaha River, Florida*, 1895; and by *Additional Mounds of Duval and Clay Counties, Florida*; *Mound Investigation on the East Coast of Florida*; *Certain Florida Coast Mounds North of the St. Johns' River*, 1896. Having exhausted the Florida mounds, he turned his attention to those on the coast farther north, of which he gave the results in *Certain Aboriginal Mounds of the Georgia Coast*, 1897. Continuing this work, he published *Certain Aboriginal Mounds of the Coast of South Carolina*; of the

*Savannah River; and of the Altamaha River*, 1898. His last work is *Certain Aboriginal Remains of the Alabama River*, 1899. Among his many finds were numerous large burial-jars, containing human crania and other portions of the skeleton, stamped with a singular and complicated ornamentation. There were also two breastplates, made of thin sheets of hammered native copper, over a foot square, with striking designs in *repoussé* work. The question of the original source of this copper is most carefully studied.

In 1896 the legislature of the state of New York appropriated \$5000, "to be used by the regents of the University for increasing the state collection illustrating New York aboriginal life, and for preserving such facts as might seem to them of most value." Besides securing several valuable collections, it was thought "advisable to issue some bulletins of a popular nature illustrating the antiquities of New York, especially the implements and monuments of the aborigines." Rev. Dr. William M. Beauchamp, of Baldwinsville, who has been engaged in such studies for a quarter of a century, and who has accumulated a vast amount of valuable illustrative material, was made the editor. There have already been issued three numbers of the Bulletin, which are supplied for twenty-five cents each, and are sufficiently well illustrated for their purpose: *Aboriginal Chipped Stone Implements of New York; Polished Stone Articles used by the New York Aborigines before and during European Occupation; Earthen Ware of the New York Aborigines*.

Hon. Jacob V. Brower, of St. Paul, Minn., whose geographical studies upon *The Mississippi River and its Source*, and *The Missouri River and its Utmost Source*, have proved of very great importance, began to turn his attention to the question of the presence of man in those regions in prehistoric times. The first results of his investigations were given in his *Missouri River*. In a second edition, in 1897, he added an archaeological appendix, giving further studies at the headwaters of the Missouri, of certain mounds at the headwaters



of the Mississippi, and at a spot which he believes, upon archaeological considerations, to be the site of Quivira, the final point reached by Coronado in his famous expedition in 1540-42. At this stage in his investigations all his papers, maps, plans, and archaeological collections were destroyed by fire; but, undeterred by this calamity, he has continued his work, and has commenced the publication of *Memoirs of Explorations in the Basin of the Mississippi*, in quarto form and handsomely illustrated. Two have already appeared: *Quivira*, in 1898; and *Harahey*, in 1899. The latter contains a valuable paper by Mr. F. W. Hodge, of the Bureau of Ethnology, at Washington, on *Coronado's March to Quivira*, the latest and one of the most exhaustive of the many studies that have been made of that interesting question. To this Mr. Brower has appended a concise bibliography of the subject.

*The American Antiquarian* was established in 1878 by Rev. Stephen D. Peet, and has had a prosperous career as a bimonthly journal, published in Chicago, to the present time. Its twenty-one volumes have contained numerous valuable contributions from various sources and concerning different countries as well as our own. Those by the editor he has collected in four volumes, under the title of *Prehistoric America*: No. 1, *The Mound-Builders and their Relics*; No. 2, *Animal Effigies and Emblematic Mounds*; No. 3, *Cliff-Dwellings and Pueblos*; and No. 4, *Myths and Symbols, or Aboriginal Religions*.

Ten years later *The American Anthropologist* was founded, in 1888, as the organ of the Anthropological Society of Washington, and for eight years was published quarterly. It was then changed to a monthly, and appeared in this form for three years. In January, 1899, a new series was started, with an enlarged board of editors, to appear quarterly and with a larger page. Among the present editors are officers of all the archaeological museums of our country. It is by far the most important periodical in America devoted to the science of anthropology; and its articles are fully up to the standard of the best European journals of a similar character. An acquaintance

with its contents is indispensable to the student of American antiquities.

Several ineffectual attempts have been made to establish an archaeological monthly of a popular character. In 1893 *The Archaeologist* was started and appeared for three years, when it was merged in *Popular Science*, a successful New York monthly. In 1897 the Landon Company, of Columbus, Ohio, began the publication of *The Antiquarian*, but changed the name the following year to *The American Archaeologist*. After a year's struggle it, too, was absorbed by *Popular Science*. Evidently there is not a sufficient demand to support such a journal, although many valuable articles had appeared during the five years of effort.

The only attempt at a general survey of the whole field of North American antiquities that has recently been made is a little work by Professor Cyrus Thomas, of the Bureau of Ethnology, entitled *Introduction to the Study of North American Archaeology*, 1898. The objects studied are arranged in three great groups: monuments, relics, and paleographic remains. These are distributed in three culture areas: the Arctic, the Atlantic, and the Pacific. The author denies the existence of Palaeolithic man in North America; maintains the theory of the Asiatic origin of the American tribes; and regards the so-called *Mound-Builders* as in no wise different from the other native tribes found by the European discoverers dwelling on this continent.

Mr. Warren K. Moorehead has published a little volume, giving the result of his observations during several years of work in the exploration of ancient fortifications, burial-places, and village sites, in Ohio. The title is *Primitive Man in Ohio*, and it is a fully illustrated and comprehensive statement of the facts observed in the course of his work, and of the deductions he has drawn from them. He has undertaken the publication of a series of *Bulletins* upon special subjects, of which one on *The Bird-stone Ceremonial* has just appeared.

Some valuable and costly works upon American antiquities

by European writers have appeared during the past ten years. Mr. Alfred P. Maudslay has published in London, in the *Biologia Centrali-Americana*, parts I-XI (1889-99), devoted to *Archaeology*. These embrace his valuable studies of the ruined cities of Central America, Copan, Palenque, and Chichen Itza, where he has done a vast amount of work in exploration, surveying, and taking of moulds. It is the greatest contribution to the study of ancient Maya culture that has been made since the time of Lord Kingsborough. Mr. Maudslay has generously rendered great assistance to the Honduras Expedition, of the Peabody Museum.

In 1895, Dr. Edward Seler, the head of the American department of the Ethnological Museum at Berlin, published a large folio volume with the title of *Wand-malereien von Mitla*. It contained thirteen photographs, with descriptive text, of certain paintings *in fresco* upon the walls of an inside court, belonging to one of the blocks of the well-known ancient ruined buildings at Mitla, about thirty miles southeast of Oaxaca. That particular block has been converted into a church, and the inside court has been made into a stable for the use of the curate. At the time Mr. Bandelier visited the ruins, although he was informed of the existence of the paintings, he was unable to get access to them on account of the absence of the curate (Bandelier's *Archaeological Tour in Mexico in 1881*, p. 281). Dr. Seler's discovery was accidental, and it was with great difficulty that he was able, with his wife's help, to make the copies of the frescoes given in the volume. His conclusion as to their significance is that they contain the story of Quetzalcoatl, the culture-hero of the Toltecs.

Various articles by Dr. Seler, Dr. E. Forstemann, and Dr. Paul Schellhas, upon the Aztec and Maya picture-writings, have probably done more to elucidate their significance than the writings of any other students of the subject.

The few remaining manuscripts of this character are being fast reproduced in colors for the use of students. In 1892, the American Philosophical Society published the *Codex Poinsett*,

relating to the collection of taxes in ancient Mexico; the following year the Royal Library, of Berlin, issued fac-similes of sixteen fragments of Mexican manuscripts, brought back by Humboldt, several of which are ancient; and a third, of Misteccan origin, was published in Geneva, by M. de Saussure, supposed to contain the life of a great chief. In 1899, the *Codex Borbonicus* was published in Paris, by M. E. Leroux. But the Duke of Loubat has been the most munificent promoter of these important aids to research. In 1896, he published in facsimile the *Codex Vaticanus*, a Mexican manuscript in the Vatican Library; in 1898, another Mexican codex in the Vatican Library, known as the *Codex Borgianus*; and in 1899, the *Codex Telleriano-Remensis* and *Codex Bologna*, also Mexican.

The eighth *Congrès international des Américanistes* was held in Paris, in October, 1890, and many valuable papers were presented. Since then the ninth convened at Chicago, in 1893; the tenth at Stockholm, in 1894; and the eleventh at Mexico, in 1898. In 1896 was organized the Société des Américanistes de Paris. The first number of its journal contains an article by Professor E. T. Hamy, *Conservateur du Musée d'Ethnographie*, upon the American collection exhibited at Genoa at the fourth centenary of the discovery of America.

Dr. Hamy, in 1897, began the publication of a magnificent album of sixty plates, with a commentary (*Galerie Américaine du Musée d'Ethnographie du Trocadéro*), illustrating remarkable objects to be found in that museum, characteristic of all regions of the New World. This splendid work, due to the patronage of the Duke of Loubat, was completed in September, 1898.

Baron Nils O. G. Nordenskiöld, of Sweden, the well-known cartographer, has devoted a handsomely illustrated volume to a description of *The Cliff-Dwellers of the Mesa Verde, South-western Colorado; their Pottery and Implements*, 1893. This was translated into English from the Swedish, immediately upon its publication, and gives an interesting popular account

of the outside appearance of things, but with no pretensions of scientific exploration.

Naturally the Smithsonian Institution and the Bureau of Ethnology, at Washington, have taken the leading part, during the past decade, in advancing the study of American Archaeology, both by exploration and by publication. Eleven large quarto volumes of Reports of the Bureau have appeared during this time. As these volumes have been widely distributed and are well known to all students of American antiquities, and their value is fully appreciated by them, I will content myself, from lack of space, with merely giving a list of the articles contained in each volume, without attempting any analysis of their contents. Vol. VI: *Ancient Art of the Province of Chiriqui, Columbia*, by William H. Holmes; *A Study of the Textile Art in its Relation to Form and Development*, by the same; *Aids to the Study of the Maya Codices*, by Cyrus Thomas; *Osage Traditions*, by Rev. J. Owen Dorsey; *The Central Eskimo*, by F. Boas. Vol. VII: *Indian Linguistic Families*, by J. W. Powell; *The Mide-wiwin, or Grand Medicine Society of the Ojibwas*, by W. J. Hoffman; *The Sacred Formulas of the Cherokees*, by James Mooney. Vol. VIII: *A Study of Pueblo Architecture, Tusayan and Cibola*, by V. Mindeleff; *Ceremonial of Hasjelti Dailgis, and Mythical Sand-paintings of the Navajo Indians*, by James Stevenson. Vol. IX: *Ethnological Results of the Point Barrow Expedition*, by John Murdock; *The Medicine-men of the Apaches*, by John G. Bourke. Vol. X: *Picture-writing of the American Indians*, by Garrick Mallery. Vol. XI: *The Sia*, by Matilda C. Stevenson; *Ethnology of the Ungava District*, by Lucien M. Turner; *A Study of Siouan Cults*, by J. Owen Dorsey. Vol. XII: *Report on the Mound Explorations of the Bureau of Ethnology*, by Cyrus Thomas. Vol. XIII: *Prehistoric Textile Art of Eastern United States*, by William H. Holmes; *Stone Art*, by Gerard Fowke; *Aboriginal Remains in Verde Valley, Arizona*, by C. Mindeleff; *Omaha Dwellings, Furniture, and Implements*, by J. Owen Dorsey; *Casa Grande*

*Ruin*, by C. Mindeleff; *Outlines of Zuñi Creation Myths*, by F. H. Cushing. Vol. XIV, Part I: *The Menomini Indians*, by W. J. Hoffman; *The Coronado Expedition, 1540-1542*, by George P. Winship; Part II: *The Ghost-dance Religion and the Sioux Outbreak of 1890*, by James Mooney. Vol. XV: *Stone Implements of the Potomac-Chesapeake Tide-water Province*, by William H. Holmes; *The Siouan Indians, a Preliminary Sketch*, by W. J. McGee; *Siouan Sociology*, by J. Owen Dorsey; *Tusayan Katcinas*, by J. W. Fewkes; *The Repair of Casa Grande Ruin, Arizona*, by C. Mindeleff. Vol. XVI: *Primitive Trephining in Peru*, by M. A. Muñiz and W. J. McGee; *Cliff-ruins of Canyon de Chelly, Arizona*, by C. Mindeleff; *Day-symbols of the Maya Year*, by Cyrus Thomas; *Tusayan Snake Ceremonies*, by J. W. Fewkes.

Since 1884 the annual report of the Smithsonian Institution has appeared in two parts, the second containing the report of the National Museum. The principal articles in the first part of the report, devoted to American antiquities, have been those of Professor Otis T. Mason: in 1889, *Aboriginal Skin-dressing*; in 1890, *The Ulu, or Woman's-Knife of the Eskimo*; in 1893, *North American Bows, Arrows, and Quivers*. The report of the National Museum, for 1894, contains an article by him on *Primitive Travel*; that of 1895 one on *The Graphic Art of the Eskimo*, by W. J. Hoffman; that of 1896 one on *Prehistoric Art*, by Thomas Wilson; and that of 1897 one on *Pipes and Smoking Customs of American Aborigines*, by J. D. McGuire; *The Man's Knife among North American Indians*, by Otis T. Mason; and *Arrowpoints, Spearheads, and Knives of Prehistoric Times*, by Thomas Wilson.

The American Association for the Advancement of Science has done much to awaken an interest in the subject of American antiquities and to promote their study, through the annual meetings of its section devoted to Anthropology, held in leading cities all over the country and largely attended. The annual addresses of the vice-presidents of the section, who are always chosen from among the most distinguished students of the

science, have usually consisted of a philosophical consideration of some general topic bearing upon this branch of knowledge, or occasionally of a discussion of some special subject. These are published in full in the Proceedings of the Association, but the papers presented at the meeting are either given only in abstract, or by title, and usually they are afterward published elsewhere

The much debated question of the alleged discovery of this continent by the Norsemen, about A.D. 1000, was freshly revived by the appearance, in 1890, of a handsome volume with the title of *The Finding of Wineland, the Good*, by Arthur Middleton Reeves, whose early death was a loss to historical studies in this country. His researches have tended to reduce the time, during which the accounts to be found in the Sagas of the voyage of Liet Ericson must have been handed down by tradition, from four hundred to three hundred years. Every one can judge for himself the probability of the minutely circumstantial details of the voyage and the landing, which the Sagas give, having been faithfully preserved in such a manner. Probably no more literary material will ever be found bearing upon this question, and the believers in the authenticity of the Saga stories have consequently attempted to strengthen their position by what they claim to be archaeological evidence as recently discovered, of the presence of the Norsemen upon our shores. The late Professor E. N. Horsford was the chief champion of these discoveries, and he devoted a vast amount of labor and spent a great deal of money in propagating his views. The site of the landing was located by him upon the banks of the Charles River, in Cambridge, and he found what he regarded as extensive remains of the continued occupation of the Norsemen farther up the river, in Watertown and elsewhere. No one can find any fault with Professor Horsford for printing his arguments in the most sumptuous form, and with a wealth of illustration from photographs and reproductions of ancient maps; but the sober student of history cannot refrain from a smile, when he embodies his notions in the solid masonry

of Norumbega Tower. Every seeker after the truth, however, must enter a protest against what he reads upon a marble slab inserted in the parapet of the stone bridge between Watertown and Newton, which stands upon the site of the earliest bridge ever built across the Charles River, in 1641, as is very properly commemorated by a suitable inscription. On the opposite parapet is the following astonishing assertion, similarly placed, and claiming equal authority in the minds of generations of school children: *Outlook upon the Stone Dam and Stone-walled Docks and Wharves of Norumbega, the Seaport of the Norsemen in Vineland. Erected by Eben Norton Horsford, December 31, 1892.*

For the past five or six years the belief in the existence of palaeolithic man in North America, which is universally accepted by the prehistoric archaeologists of Europe, and by numerous students of the question in this country, has been most strenuously contested by a certain school of archaeologists in the United States. These claim that there is no conclusive proof that palaeolithic implements have ever been found *in situ*, in the glacial gravels, at Trenton and elsewhere, and that what are claimed as such are merely the unfinished work of the Indians. Some have even gone to the extreme of asserting that no such implement has ever been found in Europe or in any other country. As neither side is able to convince the other, and as the question is the most burning one at present before the archaeologists of this country, I think it best to merely state the fact, without attempting to give a summary of the arguments on each side; especially as the present writer has published numerous articles in favor of the existence of Palaeolithic man, in this country, and his impartiality might be questioned by the other side.

HENRY W. HAYNES.